



A halocarbon is a carbon-containing compound with a halogen substituent.

**Halocarbons** are a class of organic compounds containing covalently bonded fluorine, chlorine, bromine, or iodine.

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Introduction to Functional Groups &gt; Halogen Substituents

- On the basis of their common names, halocarbons in which a halogen is attached to a carbon of an aliphatic chain are called **alkyl halides**.
- Halocarbons in which a halogen is attached to a carbon of an arene ring are called **aryl halides**.

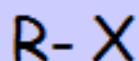
↓  
benzene  
(aromatic)

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## Organic Halides



-Compounds in which one or more hydrogens is replaced by halogens. (Group VII elements)

- many are toxic or carcinogenic
- Naming: same as aliphatic hydrocarbons, except branch has halogen name shortened to "o" ending. Ex. Bromo, fluoro etc.



## Organic Halides

FREONS-CFC's used in refrigerators and air conditioners

TEFLON-Cookware and labware

DDT-banned insecticide

PCB's- used in electrical transformers

The chemical stability of DDT and its fat solubility compounded the problem. DDT is not metabolized very rapidly by animals; instead, it is deposited and stored in the fatty tissues. The biological half-life of DDT is about eight years; that is, it takes about eight years for an animal to metabolize half of the amount it assimilates. If ingestion continues at a steady rate, DDT builds up within the animal over time.

